



**Empire State
Development**

KINGSBORO PSYCHIATRIC CENTER MIXED-USE PROJECT
Draft Scope of Work to Prepare a Draft Environmental Impact Statement

December 2022

Kingsboro Psychiatric Center Mixed-Use Project

Draft Scope of Work to Prepare an Environmental Impact Statement

A. INTRODUCTION

Pursuant to the New York State Environmental Quality Review Act (“SEQRA”), codified in Article 8 of the Environmental Conservation Law, and its implementing regulations (6 NYCRR Part 617), the New York State Urban Development Corporation d/b/a Empire State Development (“ESD”) intends to prepare an Environmental Impact Statement (“EIS”) for the proposed “Kingsboro Psychiatric Center Mixed-Use Project” (“Proposed Project” or “Project”), in the East Flatbush section of the Borough of Brooklyn (Kings County), New York. ESD is proposing to serve as the Lead Agency for SEQRA.

The Proposed Project, which ESD is advancing in collaboration with New York State Homes and Community Renewal (“HCR”), envisions a comprehensive redevelopment of a site consisting of approximately 7.2 acres (the “Project Site”) on the westernmost portion of the parcel located at 681 Clarkson Avenue, Brooklyn, New York 11203 (Brooklyn Tax Block 4833, Lot 1), which contains the Kingsboro Psychiatric Center (referred to herein as “KPC”), operated by the New York State Office of Mental Health (“OMH”). The Project Site would comprise property conveyed to the conditionally designated developer through ESD, by the Dormitory Authority of New York (“DASNY”) to be redeveloped with affordable and supportive residential housing, homeless shelters to replace those currently existing on the Site, and other uses including community facilities, open space, related services, and a grocery store. The Proposed Project is part of New York State’s Vital Brooklyn Initiative, a comprehensive community development program that addresses chronic social, economic, and health disparities in Central Brooklyn.

To facilitate the redevelopment of the Project Site for the Proposed Project, ESD proposes to adopt a General Project Plan (“GPP”) in accordance with the New York State Urban Development Corporation Act (“UDC Act”), which will provide an override of New York City zoning requirements to the extent necessary to support the Proposed Project. Following completion of environmental review of the Proposed Project and final approval of the GPP, ESD would acquire the Project Site from the current owner, the People of the State of New York acting through the DASNY, and reconvey it to entities controlled by a conditionally designated development team consisting of Douglaston Development LLC, Breaking Ground Housing Development Fund Corporation, Almat Urban LLC, Andrew Velez Construction, Inc., Jobe Development Corp., and the Brooklyn Bureau of Community Service (collectively, the “Developer”).

In accordance with the GPP, the Developer would proceed to develop the Project Site with approximately 1,033,039 square feet (“sf”) of residential space (including approximately 1,090 new units of affordable housing, two new state-of-the-art single-adult men’s homeless shelters, which would fully replace the existing 364 beds currently available at the Project Site), approximately 8,092 sf of commercial space

(comprising a grocery store), approximately 38,378 sf of community facility space (including a Service Employees International Union (“SEIU”) facility, an emergency food provider, a ballet studio, and social service space), approximately 15 parking spaces, and 2.80 acres of open space, of which approximately 2.16 acres will be publicly-accessible.

Construction of the Proposed Project is anticipated to be undertaken in three phases, with the first phase commencing in January 2024 and the final phase being completed in December 2030, with full occupancy by June 2031.

B. PROJECT IDENTIFICATION

Project Location & Context

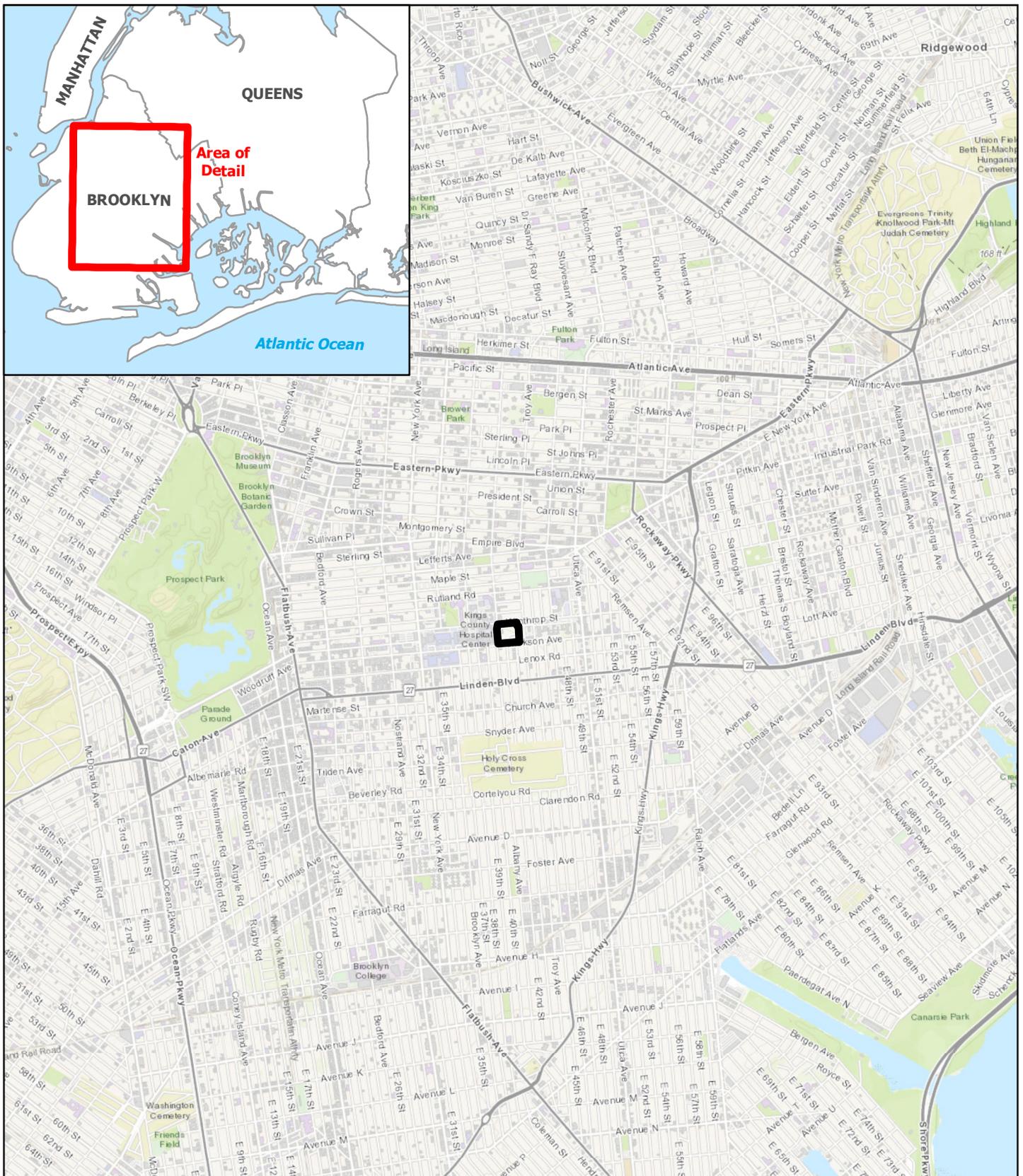
The Project Site is located in the East Flatbush section of Brooklyn (Kings County), New York (see Figure 1, “Project Location”). It comprises approximately 313,632 sf (+/- 7.2 acres) of Lot 1 on Block 4833 located on the westernmost portion of the KPC. The Project Site is bordered by Winthrop Street to the north, Clarkson Avenue to the south, and Albany Avenue to the west. The eastern portion of the Project Site, which does not have street frontage, adjoins the remaining portion of the KPC campus.

The KPC campus currently comprises all of Block 4833. The portion of the campus located within the Project Site is currently surrounded by perimeter fencing and developed with five existing buildings, an internal driveway network, and landscaped areas. Two of the buildings on the Project Site, utilized as single-adult men’s homeless shelters, are Kingsboro Star, a 221-bed shelter operated by the New York City Department of Homeless Services (“NYCDHS”) of the New York City Department of Social Services (“NYCDSS”), and Kingsboro MICA, a 143-bed shelter operated by the Salvation Army (as contracted by NYCDHS). Two other buildings on the Project Site are former garages that are now utilized by OMH for storage. The final building on the Project Site is not actively utilized due to safety concerns. The central portion of the Project Site is a lawn that had formerly been the site of a now demolished KPC building and is currently utilized for vehicle storage by the New York State Office of General Services (“OGS”).

Access to these buildings is provided by the internal driveway network of the KPC campus that traverses Block 4833. One of these driveways is a horseshoe-shaped road with entrance and egress points on Clarkson Avenue. Landscaping and overgrowth, such as trees, lawns, meadow, and bushes, are present throughout the Project Site. Wrought-iron fencing with brick columns separates the Project Site from the surrounding streetscapes of Clarkson Avenue, Albany Avenue, and Winthrop Street. The Project Site’s eastern edge is defined by chain-link fencing separating it from the remainder of the KPC campus on the same block. The portion of the KPC campus to the east of the Project Site includes 19 buildings, an internal

driveway network, landscaped areas, as well as surface parking facilities which, collectively, serve as the KPC providing psychiatric care to people with serious mental illness. The KPC provides comprehensive psychiatric care including crisis residence for discharged patients, transitional residences, and family care programs.

The Project Site is located among a large concentration of healthcare institutions in Brooklyn, near Kingsbrook Jewish Hospital, Kings County Hospital, the State University of New York (“SUNY”) Downstate Hospital, and KPC (which currently operates and will continue to operate on the remainder of the KPC campus, east of the Project Site). Residential neighborhoods consisting of attached and semi-detached residences, as well as some multifamily buildings, are located to the north and south of the Project Site.



Source: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; STV Incorporated, 2022.



Figure 1

PROJECT LOCATION

KPC Mixed-Use Project



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Proposed Development Program

As noted in Section A, “Introduction,” above, ESD proposes to acquire title to the Project Site from DASNY and reconvey it to the Developer for its redevelopment as affordable housing, supportive housing, shelters, and other uses. The redevelopment would be undertaken in accordance with a GPP that ESD would adopt under the UDC Act.

The Proposed Project would provide up to approximately 1,033,039 sf of residential space (including approximately 1,090 new units of affordable housing, of which approximately 9.3 percent would be homeownership units, and two new state-of-the-art single-adult men’s homeless shelters, which would fully replace the existing 364 beds currently available at the Project Site), approximately 8,092 sf of commercial space (comprising a grocery store), approximately 38,378 sf of community facility space (including a SEIU facility, an emergency food provider, a ballet studio, and social service space), approximately 15 parking spaces, and 2.80 acres of open space, of which approximately 2.16 acres would be publicly-accessible (see Figure 2, “Site Plan”). All Proposed Project buildings would employ exclusively electric heating, ventilation, and air conditioning (“HVAC”) systems and passive house design.

The GPP would require that 100 percent of the approximately 1,090 residential units developed as part of the Proposed Project be income-restricted, with all units affordable to households earning up to 80 percent of the area median income (“AMI”). The GPP would require a total of 764 general housing units, of which 337 would be set aside for senior citizens earning up to 50 percent of the AMI. The GPP would also require the provision of a total of approximately 326 supportive housing units, as follows: approximately 136 units would be set aside specifically for the chronically homeless, approximately 139 units would be designated for those with behavioral health concerns (i.e., serious mental illness), approximately 25 units would be designated for young adults aged 18-25, and approximately 26 units would be designated for youth aging out of foster care (“YAOFC”) (see Table 1, “Proposed Affordable Housing Types and Number of Units”).

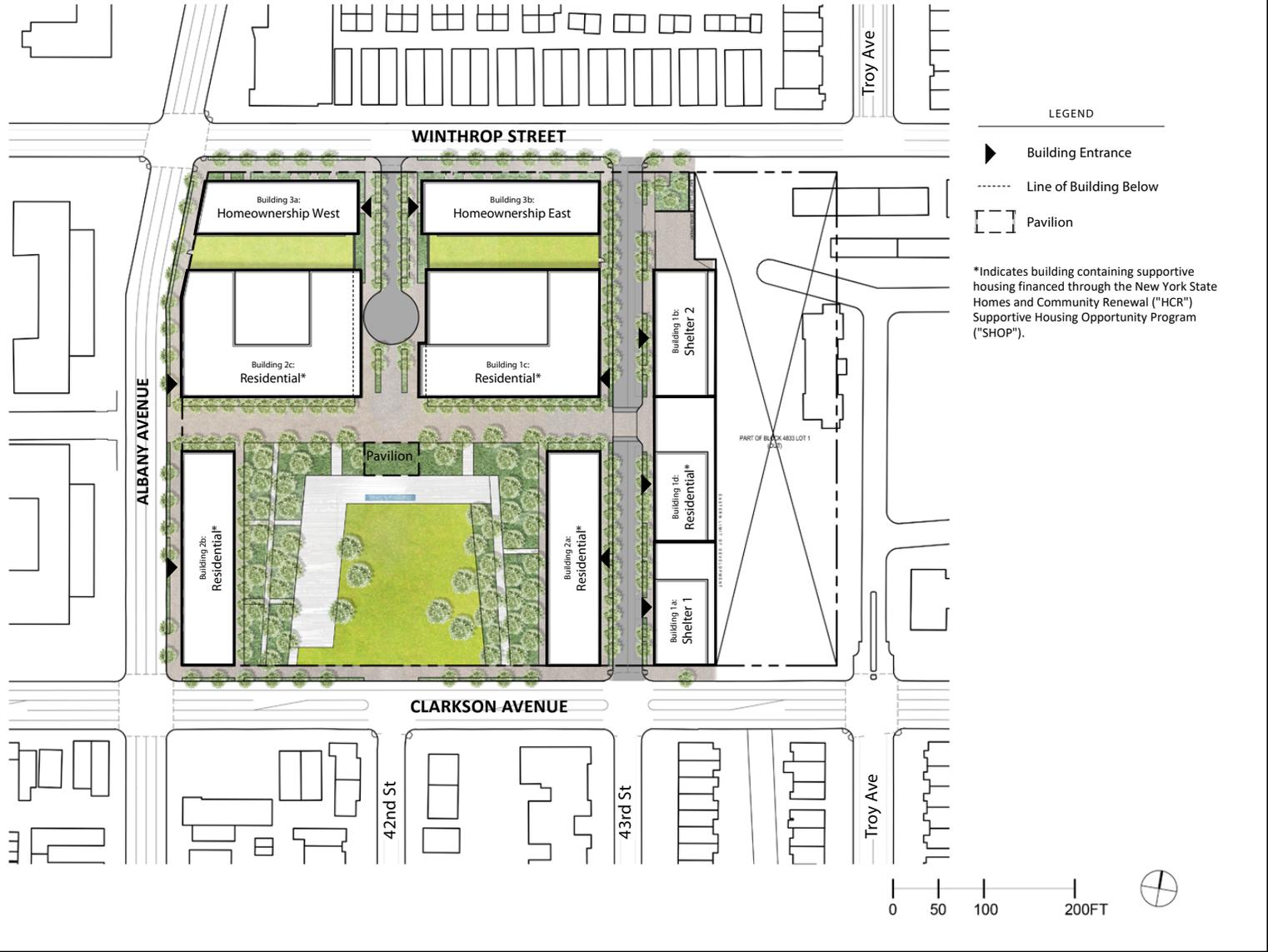
Table 1: Proposed Affordable Housing Types and Number of Units

Affordable Housing Types	Number of Units
General Housing	
General Population	427
Senior Citizen	337
Supportive Housing	
Chronically Homeless	136
Behavioral Health (SMI)	139
Young Adults Aged 18-25	25
Youth Aging Out of Foster Care	26
Grand Total	Approx. 1,090

Source: Douglaston Development, 2022.

The Proposed Project would create two new publicly-accessible privately-owned driveways (see Figure 2, “Site Plan”). One would be a one-way private driveway that would align with 43rd Street with an entrance on Clarkson Avenue and exit on Winthrop Street. The other would be a 200-foot long two-way cul-de-sac driveway with one entrance and exit located on Winthrop Street.

Proposed Site Plan



Source: Douglaston Development, 2022.

Figure 2
SITE PLAN

KPC Mixed-Use Project



It is anticipated that construction would be undertaken in three phases, with the first phase commencing in January 2024, and the final phase being completed in December 2030, with full occupancy expected by June 2031. For the purposes of applicable EIS analyses, the estimated schedule for construction phasing and occupancy is presented in Table 2, “Construction Phasing Plan,” based on typical construction timelines.

Table 2: Construction Phasing Plan

Phase	Start of Demolition	Start of Construction	Completion of Construction	100 Percent Occupancy
Phase 1	January 2024*	January 2024	May 2026	May 2027
Phase 2	July 2026	July 2026	December 2028	December 2029
Phase 3	January 2029	January 2029	December 2030	June 2031

*NOTE: The two existing single-adult men’s homeless shelters would remain in operation during construction of the new shelter facilities. Prior to the demolition of the existing shelter structures, all services provided in existing shelter facilities would be relocated into the new shelter facilities located on the Project Site, serving the same number of residents.

Source: Douglaston Development, 2022.

C. PURPOSE AND NEED

The Proposed Actions (defined in Section D, “Required Discretionary Actions”) would facilitate the construction of affordable housing in a significantly underserved area, the East Flatbush section of Brooklyn, New York. The proposed acquisition, sale, and redevelopment of the Project Site would allow for the reuse of substantially underdeveloped acreage to provide affordable housing including supportive housing, as well as housing for senior citizens. The Proposed Project would provide new state-of-the-art facilities to serve the residents and programs of the two existing single-adult men’s homeless shelters that would be replaced.

As part of New York State’s Vital Brooklyn initiative, a New York State community development initiative that leverages State programs and resources to improve health and wellness in Central Brooklyn, the Proposed Project would also improve economic opportunities in East Flatbush, which has long suffered from disinvestment and marginalization that have hindered the well-being of its residents. Residents experience measurably higher than average rates of obesity, diabetes, and high blood pressure, limited access to healthy foods or opportunities for physical activity, as well as higher-than-average rates of unemployment and poverty.¹ The Proposed Project seeks to ameliorate these conditions by creating a health-centered community that provides open space, walkable access to retail destinations, and proximity to a large concentration of healthcare infrastructure (Kingsbrook Jewish Hospital, Kings County Hospital, SUNY Downstate Hospital, and KPC). Furthermore, the Project would provide up to

¹ Northwell Health (2016), *The Brooklyn Study: Reshaping the Future of Healthcare Restructuring and investing in healthcare delivery in the communities of central and northeastern Brooklyn*.

https://www.northwell.edu/sites/northwell/files/20830-Brooklyn-Healthcare-Transformation-Study_0.pdf

approximately 3,700 construction jobs and 389 permanent jobs for area residents. As such, the Proposed Project would provide affordable housing to an underserved portion of Brooklyn, including supportive housing and housing for senior citizens, and improve wellness and economic opportunities as part of the Vital Brooklyn initiative.

D. DISCRETIONARY ACTIONS

The Proposed Project is expected to require the following discretionary actions and approvals, which collectively comprise the Proposed Actions:

- ESD adoption and affirmation of a General Project Plan pursuant to the UDC Act, including possible overrides of the New York City Zoning Resolution (“ZR”) to the extent necessary to support the Proposed Project. ESD also would establish Design Guidelines (the “Design Guidelines”) for the Proposed Project that would address, among other things, use, bulk, and dimensional parameters that would be applied in lieu of zoning. The Proposed Project would be required to comply with the Design Guidelines.
- DASNY subdivision of Block 4833, Lot 1, for disposition and conveyance of the Project Site to ESD.
- ESD acquisition of the Project Site from DASNY and subsequent reconveyance of the Project Site to the Developer.
- Possible funding and/or financing from the following:
 - New York State Homes and Community Renewal
 - New York State Office of Mental Health
 - New York City Department of Housing Preservation and Development, and
 - New York City Housing Development Corporation
 - New York City Department of Homeless Services
- DHS will award contracts to the Developer to operate shelter facilities.
- Termination, release, modification, and/or acquisition of a deed restriction in favor of the City of New York in a 1914 deed from the City to the State of New York for the current KPC campus site.
- Approval by the New York State Public Authorities Control Board (“PACB”) of ESD’s proposed acquisition and disposition of the Project Site.

E. PREPARATION OF AN ENVIRONMENTAL IMPACT STATEMENT (“EIS”)

The EIS will contain:

- A description of the Proposed Project and its environmental setting;
- A statement of the environmental impacts of the Proposed Project, including its short- and long-term effects, and typical associated environmental effects;
- An identification of any significant adverse environmental effects that cannot be avoided if the Proposed Project is completed;
- A discussion of alternatives to the Proposed Project;
- An identification of any irreversible and irretrievable commitments of resources that would be involved if the Proposed Project is built; and
- A description of mitigation measures proposed to avoid or minimize any significant adverse environmental impacts.

Except where otherwise noted in methodologies of respective technical analyses, as described herein, most EIS analyses for the Proposed Project will be performed for 2031 (the “analysis year”), when the Project is expected to be completed and fully operational. For this build year, the EIS will assess the potential for the Proposed Project to result in any significant adverse impacts by comparing conditions anticipated with the Proposed Project fully constructed and operational (“With Action conditions”) to conditions expected without the Proposed Project (“No Action conditions”). The EIS will assume that the physical condition of the Project Site in the future without the Proposed Project would resemble existing conditions. In addition, the EIS also will account for other “background projects” and/or changes expected to occur independent of the Proposed Project but in the vicinity of the Project Site, as appropriate.

Consistent with ESD practices, because the Proposed Project would be developed in New York City, this EIS will be prepared generally following the guidelines of the New York City Environmental Quality Review (“CEQR”) *Technical Manual*.² In this way, the Proposed Project may be assessed in a manner that appropriately reflects the urban conditions and setting of the Project Site.

Screening Analyses

Based on the guidance, methodologies, and thresholds of the *CEQR Technical Manual*, it is expected that the following environmental areas will not require detailed analysis in the EIS. For each of these areas a

² The EIS will utilize the most recent version of the New York City Mayor’s Office of Environmental Coordination *CEQR Technical Manual*, last updated December 2021. The *CEQR Technical Manual* can be accessed here: https://www1.nyc.gov/assets/oec/technical-manual/2021_ceqr_technical_manual.pdf

brief screening analysis, following the guidelines of the *CEQR Technical Manual*, will be presented in the EIS, with further detailed analyses if the screening analyses indicate they are warranted:

SOCIOECONOMIC CONDITIONS

The Proposed Project would not 1) result in substantial direct changes to existing residential populations, 2) displace employees or businesses, 3) result in new development that differs markedly from the surrounding neighborhood, 4) create retail concentrations that may draw a substantial amount of sales from existing businesses within the study area, or 5) affect conditions in a specific industry. Therefore, per the guidance of the *CEQR Technical Manual*, no analysis of potential impacts to socioeconomic conditions is warranted.

Although the Project Site houses two existing single-adult men's homeless shelters, the Proposed Project would provide replacement facilities matching the existing number of beds for these 1930's-era shelter facilities. The remaining buildings on the Project Site are either vacant or used for storage. The Proposed Actions would result in development of the Project Site in a manner consistent with surrounding development. The Proposed Project would provide affordable and supportive housing and would not affect the surrounding land use pattern, nor substantially alter the socio-demographic composition of the area as the development would be limited to residents at or below 80 percent of the AMI, thereby introducing new population expected to have incomes similar to the surrounding neighborhood. Therefore, the development of the Project Site would neither directly displace residents or businesses, nor would it be expected to result in indirect displacement of surrounding businesses. In addition, the Proposed Project would not affect the availability of goods and services, nor would it affect economic investment in a way that could change the socioeconomic character of the area.

Further, the Proposed Project would not result in indirect residential displacement that would adversely affect low-income populations, as the Project would provide affordable housing and provide replacement facilities for two existing single adult men's homeless shelters. Further, indirect displacement would be unlikely as the Proposed Project would not place market-rate demand pressure on the surrounding neighborhood.

For these reasons, a detailed socioeconomics study, pursuant to the guidance of the *CEQR Technical Manual*, is not warranted. However, demographic data will be provided in order to describe the social context of the Proposed Project, as well as to inform detailed analyses of potential impacts to Schools, Early Childhood Programs, Libraries, and Open Space. In order to create the boundaries of the Proposed Project's study area, and to assess the likelihood of direct and/or indirect impacts on the residential population, the existing population and the No Action population will be estimated. This demographic information will provide context for the Socioeconomics chapter, as well as support Community Facilities and Services and Open Space analyses. Information to be provided will include:

Existing population characteristics, based on U.S. Census data, will be presented for the existing conditions in the study area census tracts identified within a study area approximating a ¼-mile radius around the Project Site. A profile of a residential population will be presented which includes: total number of residents, household size, income, age distribution, and ethnicity. These data will be compared to corresponding data for Brooklyn and the City.

No Action conditions will be represented as no new development on or occupancy of the Project Site, and With Action conditions will represent the Proposed Project. Off-site development expected to occur by 2031, as determined in the Land Use, Zoning, and Public Policy chapter, will be considered to estimate total No Action population in the study area.

The existing and No Action Condition population characteristics serves as the basis for community facilities and services and open space analyses.

COMMUNITY FACILITIES AND SERVICES – HEALTHCARE AND POLICE AND FIRE SERVICES

The Proposed Project would not directly affect healthcare or police and fire service facilities, such as by relocating a community facility. The *CEQR Technical Manual* recommends an analysis of potential indirect impacts on public healthcare facilities and police and fire protection if an action would introduce a sizeable new neighborhood where none existed before. The Proposed Project would not create a sizeable new neighborhood where none existed before. Therefore, detailed analysis of police/fire services and healthcare facilities is not required; however, for informational purposes, a description of existing police, fire, and healthcare facilities serving the Project Site will be provided.

- Pursuant to the guidance provided in the *CEQR Technical Manual*, the location of hospitals and public health clinics serving the site will be identified on a map, and the name and location of the facility, its size, and its population and/or service area will be determined and presented.
- The locations of New York City Police Department (“NYPD”) and New York City Fire Department (“FDNY”) facilities serving the site will be identified and included on a map to illustrate their proximity to the proposed site.
- The NYPD and FDNY will be contacted for the appropriate information (service area, service issues, etc.) and correspondence will be included, as appropriate, in the EIS.

SOLID WASTE AND SANITATION SERVICES

According to the *CEQR Technical Manual*, a solid waste and sanitation services assessment determines whether a project has the potential to cause a substantial increase in solid waste production that may overburden available waste management capacity or otherwise be inconsistent with the City’s Solid

Waste Management Plan (“SWMP”) or with State policy related to the City’s integrated solid waste management system. Few projects have the potential to generate substantial amounts of solid waste (50 tons per week or more) that could result in a significant adverse impact. However, it is recommended in the *CEQR Technical Manual* that the solid waste and service demand generated by a project be disclosed, based on standard waste generation rates. Therefore, the amount of solid waste that the Proposed Project would generate will be calculated, using solid waste generation rates provided in the *CEQR Technical Manual*, and disclosed in the EIS. The Proposed Project would not be of a type or size, as explained in the *CEQR Technical Manual*, that would be considered “substantial” new development likely to result in 50 tons of solid waste generated per week. Therefore, a detailed solid waste generation analysis would not be required.

If it is determined that the development would result in 50 tons of solid waste generated per week, a detailed solid waste generation analysis would be required.

ENERGY

The annual energy consumption will be calculated for the residential, commercial (grocery store), shelter and community facility uses that would be introduced with the Proposed Project in accordance with the *CEQR Technical Manual*. As noted in the *CEQR Technical Manual*, all new structures requiring heating and cooling are subject to the New York City Energy Conservation Code. Additionally, Local Law 97, which was passed in April 2019, sets emission caps for buildings larger than 25,000 sf beginning in 2024. The Proposed Project would utilize electric HVAC systems. A detailed assessment of energy impacts is limited to projects that may significantly affect the transmission or generation of energy or generate substantial indirect consumption of energy (such as data centers or web hosting facilities). The Proposed Project would not significantly affect the transmission or generation of energy. Therefore, per the *CEQR Technical Manual*, a detailed energy analysis in the EIS is not required.

Scope of Work for Detailed Analyses

TASK 1: PROJECT DESCRIPTION

The first chapter of the EIS will introduce the reader to the Proposed Project and set the context in which to assess impacts. The chapter will contain Project identification; the background and history of the Project and Project Site; a statement of purpose and need for the Proposed Project; a detailed description of the Proposed Actions necessary to achieve the Project; a description of the development program, project siting, and design; and a discussion of approvals required, procedures to be followed, and the role of the EIS in the process. This chapter is the key to understanding the Proposed Project and its impacts,

and gives the public and decision-makers a base from which to evaluate the Project against the future without the Proposed Project.

TASK 2: LAND USE, ZONING, AND PUBLIC POLICY

Given that most of the area surrounding the Project Site is fully developed, it is unlikely that the Proposed Actions would affect land use, zoning, or public policy off-site. However, a chapter will be prepared to provide an overview of the context in which the Proposed Actions would occur including the ESD zoning override and implementation of a GPP.

The land use and zoning analyses, consistent with the guidelines of the *CEQR Technical Manual*, will include a land use study area that encompasses a 400-foot radius around the Project Site. The chapter will consider the Project's effect in terms of land use compatibility and land use trends as well as officially adopted plans and policies. This chapter will:

- Describe conditions on the Project Site, including the existing conditions and the underlying zoning;
- Describe the predominant land use patterns in the study area, including recent development trends. Generalized land use patterns and a discussion of trends in the surrounding neighborhood will also be presented;
- Describe existing zoning and recent zoning actions, as applicable, in the study area;
- List any future known projects in the study area and describe how these projects might affect land use patterns and development trends in the study area in the future without the Proposed Project. Also, identify any pending zoning actions or other public policy actions that could affect land use patterns and trends in the study areas as they related to the Proposed Project;
- Identify public policies applicable to the Project Site and/or the purpose and need of the Proposed Project; and
- Assess the potential impacts of the Proposed Project on land use, zoning, and public policy.

TASK 3: COMMUNITY FACILITIES AND SERVICES – SCHOOLS, EARLY CHILDHOOD PROGRAMS, AND LIBRARIES

Given the size of the residential population that would be introduced with the Proposed Project, detailed analysis of public elementary and intermediate schools, early childhood programs, and libraries will be conducted per the guidance of the *CEQR Technical Manual*.

Schools

- **Existing conditions.** Per the guidance of the *CEQR Technical Manual*, the number of high school students that would be introduced by the Proposed Project would be below the threshold for detailed analysis (approximately 150 students) based on the New York City School Construction Authority’s 2019 Multipliers.³ However, given the number of elementary and intermediate students that would be introduced as a result of the Proposed Project would exceed the threshold of 50 or more elementary/intermediate school students, a detailed analysis of potential significant adverse impacts to public elementary and intermediate schools is warranted. The study area for the analysis of elementary and intermediate schools will be the school district’s sub-district, based upon GIS files for the sub-district boundaries from the New York City Department of City Planning (“NYCDCP”). The locations of the elementary and intermediate schools will be illustrated on a map of the school district, with the sub-district study area identified, and information will be provided in the manner prescribed by the *CEQR Technical Manual*.
- **No Action and With Action conditions.** New York City Department of Education (“NYCDOE”) enrollment projections will be obtained for the No Action conditions, including special education students, and will be presented per the methodology found in the *CEQR Technical Manual*. Information on projected changes that may affect the availability of seats in the schools within the study area will be obtained from NYCDOE and NYCDCP, including plans for changes in capacity, new programs, capital projects, and improvements. The guidance of the *CEQR Technical Manual* will be followed to estimate the number of elementary- and intermediate-level school children that would be generated by the Proposed Project. These estimates will be compared to the No Action conditions to assess the potential impact of students generated by the Proposed Project on public elementary and intermediate schools. The available capacity or resulting deficiency in school seats for the sub-district study area and the school district will be calculated for elementary and intermediate schools.

Early Childhood Programs

- **Existing conditions.** The locations of publicly funded early childhood programs (e.g., EarlyLearn) within approximately 1.5 miles of the Project Site will be illustrated on a map, and information regarding location, capacity, and enrollment for existing publicly funded early childhood programs within the study area will be obtained from NYCDOE’s Division of Early Childhood Education, and provided in the manner prescribed by the *CEQR Technical Manual*.

³ Per New York City School Construction Authority and *CEQR Technical Manual* guidance, the current Projected Public School Ratio multipliers were released in 2019, and can be accessed here:
<http://www.nycsca.org/Community/Capital-Plan-Reports-Data#Housing-Projections-70>

- **No Action and With Action conditions.** NYCDOE will be contacted to obtain information on any changes planned for early childhood programs or facilities in the area of the Proposed Project. If changes are planned, they will be incorporated into the No Action capacities, together with any off-site development expected in No Action conditions. Table 6-1a of the *CEQR Technical Manual* will be used to estimate the number of eligible children, including planned residential development projects that include a substantial number of affordable housing units within the study area. The available capacity or resulting deficiency in slots and the utilization rate for the study area will be calculated for the Proposed Project. The projected demand for the Proposed Project will be added to the No Action conditions. A qualitative discussion of Universal 3-K and Pre-K can accompany the early childhood program analysis. Universal 3-K and Pre-K provide limited hours and a limited school year compared to early childhood programs and are thus not a direct replacement for such programs. However, they do expand access to education for 3-4 year old children and may alleviate some demand from families residing in low and low/middle income units who do not require the extended programming.

Libraries

- **Existing conditions.** A brief description of existing libraries within the study area (e.g., within approximately ¼-mile of the Project Site), their information services, and their user population will be provided, and the location of each identified branch library within the study area will be illustrated on a map. NYCDCP will be contacted to obtain available information on services provided and circulation, as well as an assessment of existing conditions and levels of utilization. The branch holdings (books, CD-ROMs, DVDs, Videotapes, etc.) and circulation data (from NYCDCP's NYC Facilities Explorer) will be identified. If applicable, holdings per resident may be estimated to provide a quantitative gauge of available resources in the applicable branch libraries in order to form a baseline for the analysis.
- **No Action and With Action conditions.** Information will be obtained from NYCDCP and/or Brooklyn Public Library concerning any planned new branches serving the study area, and changes to existing branches in the No Action scenarios will be estimated. No Action projects identified in the Land Use, Zoning, and Public Policy chapter will be considered, as appropriate. Holdings per resident in the With Action scenario will be estimated and compared to the No Action holdings estimate and presented in a table. With input obtained from management at library branches that would be expected to absorb the demand from the Proposed Project, the effects of the added population (including the No Action and With Action conditions) on special programs, facilities, or collections will be qualitatively assessed.

TASK 4: OPEN SPACE

No direct adverse effects to open space resources would be expected with the Proposed Project, as the Project Site contains no publicly accessible open spaces. Therefore, the open space analysis will only be concerned with potential indirect effects to open space.

The Proposed Project would not introduce more than 500 nonresidents (e.g., workers/employees, visitors, students, etc.) to the Project Site, and so nonresidential analysis is not required, per the guidance of the *CEQR Technical Manual*. Further, the Project Site is located within a NYC Walk to a Park Service Area, therefore, a detailed analysis to determine if the project may further exacerbate a condition of inadequate access to parks is not warranted, per *CEQR Technical Manual* guidance. The Proposed Project would introduce more than 200 residents however, and so a residential open space analysis will be undertaken.⁴

The analysis of open space will be undertaken as described following:

- **Existing conditions.** A study area for the preliminary open space assessment for potential indirect effects associated with residential population introduced by the Proposed Project will be developed based on a one-half mile radius around the Project Site, a reasonable walking distance that residential users would travel to reach local open space and recreational areas. All census tracts with at least 50 percent of their area within the radius will be included as part of the study area for analysis. Any census tracts that overlap with the Project Site will be included in their entirety, regardless of the percentage census tract area that is included in the radius. All open spaces within the defined study area will be identified and confirmed in the field.
 - Residential population in the study area will be based on 2020 U.S. Census data (with a population adjustment based on subsequent population estimates from NYCDP, well as population estimates based on recent residential development that would have been unaccounted for in Census data, as appropriate).
 - Per the guidance of the *CEQR Technical Manual*, open space ratios (acres of open space per 1,000 residents) will be calculated for both active open space (such as baseball fields and basketball courts) and passive open space (such as lawn or sitting areas). These open space ratios will be relied upon as a benchmark for determining potential impact on open space resources with the introduction of new residential population expected to be introduced by the Proposed Project. In addition, any larger or regional parks proximate to the open space study areas (i.e., located in adjacent census tracts that are not included as part of the study areas) may be considered when determining impact significance.

⁴ The *CEQR Technical Manual*, updated in 2021, refers to “nonresidents” and “nonresidential population,” whereas previous versions of the *CEQR Technical Manual* referred to “workers” and “worker population.”

- **No Action and With Action conditions.** Open space ratios will be calculated, as prescribed by the *CEQR Technical Manual*, for the No Action and With Action conditions, including the proposed new open space that would be created with the Proposed Project. Populations and open space expected to be introduced by No Action projects identified in the Land Use, Zoning, and Public Policy chapter will be considered, as appropriate. The analysis will begin with a preliminary assessment to determine the need for further analysis and will assess impacts of the Proposed Project based on quantified ratios and qualitative factors. The potential for significant adverse indirect open space impacts will be considered pursuant to *CEQR Technical Manual* methodology.

TASK 5: SHADOWS

The Project Site contains no sunlight sensitive resources of concern, as defined in the *CEQR Technical Manual*, that could potentially be affected by shadowing resulting from the proposed development of the Project Site. However, preliminary plans indicate that on-site buildings would be up to 150 feet in height (including bulkhead) and, according to the *CEQR Technical Manual*, buildings over 50 feet in height (including mechanical space) are generally subject to an analysis of the effect of shadows cast by the development. Specifically, the *CEQR Technical Manual* requires a shadow analysis for proposed projects that have the potential to cast new shadows on publicly accessible open space, community gardens, architectural features, historic resources, or other resources with sunlight-sensitive features.

A screening analysis will be prepared pursuant to the guidance of the *CEQR Technical Manual* to determine when new shadows would reach any sunlight-sensitive resources of concern and, if required, a more detailed analysis of shadows will be provided. Given that the Project Site comprises a portion of the KPC campus, which was determined to be a N/SR-eligible site, a detailed shadows analysis will be prepared, if warranted, based on consultation with the New York State Historic Preservation Office (“SHPO”).

TASK 6: HISTORIC AND CULTURAL RESOURCES

The *CEQR Technical Manual* identifies historic resources as districts, buildings, structures, sites, and objects of historical, aesthetic, cultural, and archeological importance. This includes designated NYC Landmarks; properties calendared for consideration as landmarks by the New York City Landmarks Preservation Commission (“NYCLPC”); properties listed on or determined eligible for the State/National Register of Historic Places (“S/NR”) or contained within a district listed on or determined eligible for S/NR listing; properties recommended by the New York State Office of Parks, Recreation and Historic Preservation (“OPRHP”) for listing on the S/NR; and National Historic Landmarks.

Based on the guidance of the *CEQR Technical Manual*, a Historic and Cultural Resources chapter will be prepared that will assess the Proposed Project’s potential effects on archaeological resources based on

the finding of a Phase 1A Archaeological study that will be prepared to support this effort. Additionally, the chapter will provide an overview of historic and architectural resources within the vicinity of the Project Site and the potential direct and contextual effects of the Proposed Project on those resources, including the KPC campus and eight existing buildings on the eastern portion of the KPC campus which were previously determined eligible for listing on the S/NR. Analysis of the potential effects of shadows on historic and architectural resources identified on and within the vicinity of the Project Site will also be provided.

TASK 7: URBAN DESIGN AND VISUAL RESOURCES

Following the guidelines of the *CEQR Technical Manual*, a preliminary assessment is appropriate if the Project would result in a physical change beyond what is allowed by existing zoning such as modifications of yard, height, and setback requirements or increase in floor area, and if such change is observable by the pedestrian. The preliminary assessment will include a description of the urban design and visual resources that exist in the study area currently, and their anticipated conditions in the future without the Proposed Project.

The Proposed Actions would facilitate more intense development on the Project Site, which is currently an underdeveloped parcel, and would introduce new land uses to the Project Site including residential, commercial, and community facility uses. The Proposed Project would include new public open spaces and publicly accessible private driveways permeating the property, and providing greater connectivity to the surrounding neighborhood than currently exists. The Proposed Project would not be anticipated to result in off-site effects, such as secondary development, or changes to the neighborhood street pattern or block configuration, though the potential for effects to the pedestrian experience on the Project Site and surrounding it will be analyzed. The analysis will also determine whether the new development would affect the context or enjoyment of any nearby visual resource.

The discussion of urban design will include the buildings anticipated to be constructed on the Project Site, as well as any potential visual resources within the study area. The chapter will describe and include photographs of the existing conditions of the site and surroundings and explain future No Action conditions. The discussion of conditions with the Proposed Project will include photographs, zoning and floor area calculations, lot coverage, building heights, project drawings and site plans, and descriptions of view corridors. Available architectural renderings of the proposed development will be included to support a description of the Project Site and its relation to the surrounding area with the Proposed Project.

TASK 8: NATURAL RESOURCES

Given that the Project Site is maintained as lawn area, existing buildings, paved driveways, and parking areas, no plant or animal species of concern are anticipated on the Project Site. However, because the

Project Site is located within the Jamaica Bay Watershed, a *Jamaica Bay Watershed Form* will be prepared and included in an appendix to the EIS, along with appropriate agency correspondence. A field inspection will be conducted, and findings will be summarized in the EIS.

TASK 9: HAZARDOUS MATERIALS

As explained in the *CEQR Technical Manual*, consideration of hazardous materials in the EIS examines whether the Proposed Project may increase the exposure of people or the environment to hazardous materials, and whether the Proposed Project may result in potential significant impacts to public health or the environment. As stated in the *CEQR Technical Manual*, the potential for significant adverse impacts from hazardous materials depends on the type of materials present and their location on the Project Site, their levels, and whether exposure to the hazardous materials would be associated with the Proposed Project, either during construction or during subsequent occupancy of the Project Site.

A Phase I Environmental Site Assessment (“ESA”) has been conducted to determine whether the Project Site may contain contamination from either past or present activities on the Project Site or as a result of activities on adjacent or nearby properties and a Phase II Investigation Report is underway to investigate the presence and extent of contamination on the Project Site, both of which will be reviewed in the EIS. The EIS will evaluate whether human exposure to hazardous materials and/or petroleum products could occur with the Proposed Project and whether potential hazardous materials exposure could affect on-site or surrounding human health or environment or whether the Proposed Project could exacerbate existing environmental contamination, if identified. The EIS will also provide recommendations for additional investigations, if warranted, and describe how potential impacts would be avoided during construction and operation of the Proposed Project, such as through engineering controls, a Remedial Action Plan (“RAP”) and/or Construction Health and Safety Plan (“CHASP”).

TASK 10: WATER AND SEWER INFRASTRUCTURE

Water Supply

According to the *CEQR Technical Manual*, a preliminary water supply infrastructure analysis is needed if a project would result in an exceptionally large demand for water (e.g., more than one million gallons per day (“gpd”)) or is located in an area that experiences low water pressure (e.g., areas at the end of the water supply distribution system). An analysis of water supply is warranted as the Proposed Project is expected to result in an incremental water demand of more than one million gallons per day compared to No Action conditions. The existing water distribution system serving the project area will be described, including known relevant factors like any known weaknesses in the local water supply distribution systems, such as sites near pressure boundaries; with a one-way flow of water; far from the nearest pressure regulator; far from the nearest trunk main; or that contain a large number of six-inch (or smaller) water mains, based

on information obtained from New York City Department of Environmental Protection's ("NYCDEP") Bureau of Water Supply and Wastewater Collection. The existing water demand generated at the Project Site will be estimated. Water demand generated by the Proposed Project will be determined per the guidance provided in the *CEQR Technical Manual* for No Action and With Action conditions and will be presented in tabular format and summarized in the EIS. The anticipated demand will be assessed to determine if there would be sufficient capacity to maintain adequate supply and pressure. The NYCDEP Bureau of Environmental Planning and Analysis ("BEPA") will be contacted for general assistance, as appropriate. Water conservation measures expected to be implemented as part of the Proposed Project also will be described.

Sewers and Stormwater Assessment

The Project Site is located in an area with a combined sewer system and is served by the Coney Island Wastewater Resource Recovery Facility ("WRRF"). The Proposed Project would introduce a net increase of more than 400 residential units compared to No Action conditions, which is the threshold found in the *CEQR Technical Manual*; thus, a preliminary wastewater/stormwater analysis will be required.

The preliminary analysis of sewers focuses on the effects of increased sanitary and stormwater flows on the City's infrastructure serving the site. Therefore, the study area for the Proposed Project will include the Coney Island WRRF and the conveyance system comprising the plant's drainage basin and affected sewer system. The study area will be defined in accordance with the *CEQR Technical Manual*, and the following steps will be completed per CEQR methodologies:

- **Existing conditions.** Describe the existing wastewater and stormwater conveyance systems and the Coney Island WRRF and determine the existing sanitary flows or treated wastewater flows resulting from the area of the Proposed Project.
- **No Action and With Action conditions.** Future No Action estimates of the expected sanitary flows or treated wastewater flows will be determined based on *CEQR Technical Manual* guidance; should other topical areas (e.g., Land Use, Zoning, and Public Policy) reveal No Action projects, they may be included in the future No Action conditions for the assessment of sewers, if appropriate. The volume and peak discharge rates of stormwater and sewage expected from the site with the Proposed Project will be determined for a range of rainfall events. The NYCDEP matrix in Worksheet 2 in the *CEQR Technical Manual* will be utilized for this purpose. If the matrix analysis indicates an increase of 2 percent or more over existing conditions for dry and wet weather flows from the Project Site for any rainfall event that would discharge to the Jamaica Bay watershed, then, per the *CEQR Technical Manual* procedure, the matrix should be reviewed by NYCDEP for guidance as to whether further modeling is necessary. Conditions on the Project Site with and without the Proposed Project will be described in the EIS and presented in a tabular format, per the guidance of the *CEQR Technical Manual*, and summarily described in the EIS.

TASK 11: TRANSPORTATION

The transportation analyses conducted for the Proposed Project will include traffic, bus, subway, and pedestrian analyses to determine the potential impacts associated with the Proposed Project. In addition, vehicular and pedestrian safety evaluations will also be prepared. Parking demand generated by the Proposed Project will also be considered in a parking analysis.

Traffic Analysis

As the Proposed Project would be expected to exceed the 50-trip *CEQR Technical Manual* analysis threshold, detailed traffic analyses are proposed. These traffic analysis tasks will be undertaken as described following:

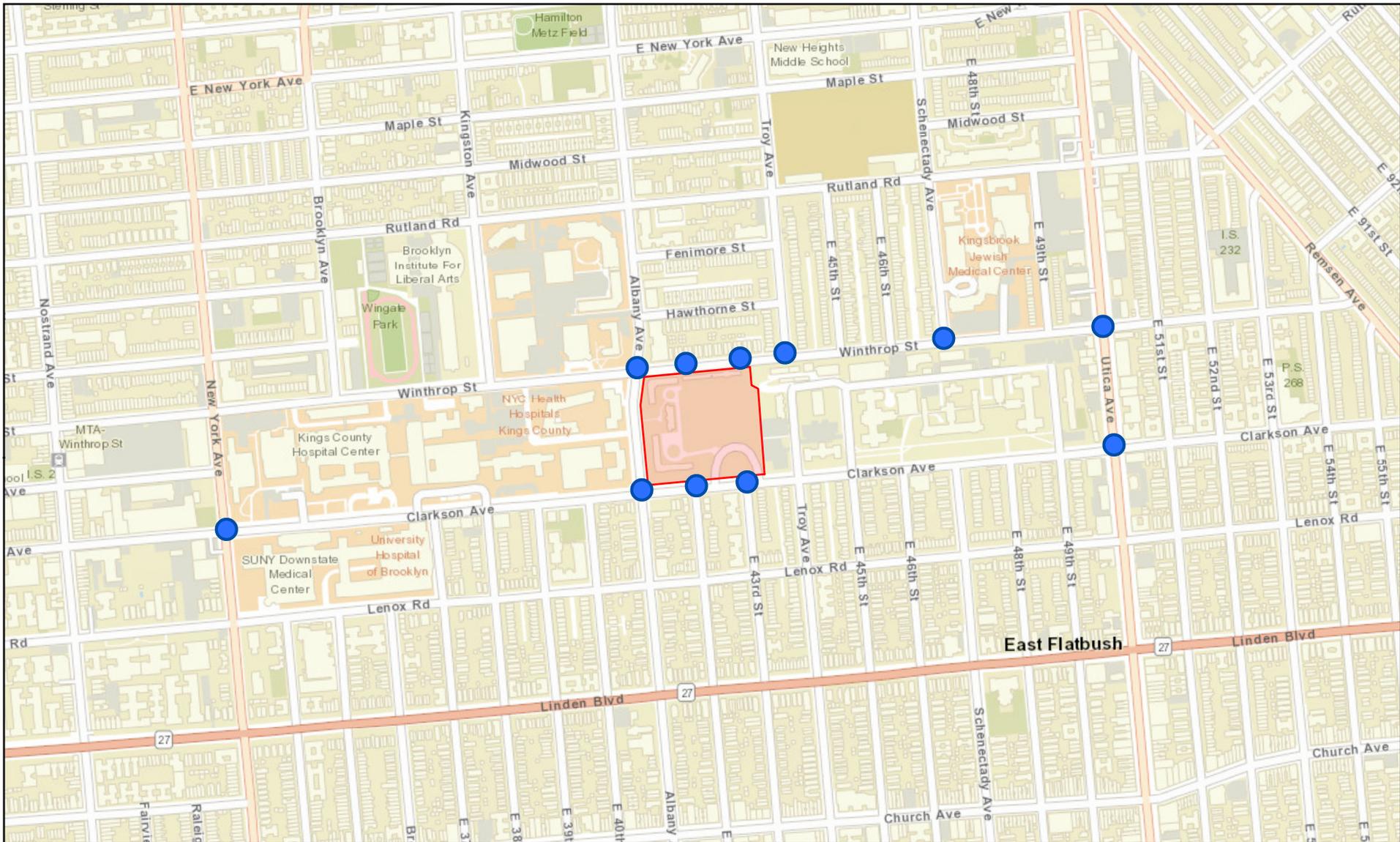
- **Existing conditions.** To develop an understanding of existing conditions, an existing conditions traffic network will be developed. Traffic counts will be conducted at traffic analysis locations via a mix of automatic traffic recorder (“ATR”) machine counts and intersection turning movement counts. ATRs will provide continuous 24-hour traffic volumes for a minimum of nine days (including two weekends) along the principal corridors serving the Project Site. Vehicle classification turning movement counts will be conducted during the weekday 6-9 AM, 12-2 PM midday, 3-6 PM, and Saturday 12-4 PM midday peak periods. These traffic data collection periods will be sufficient to perform detailed traffic assessments of the Proposed Project’s operational and construction-phase conditions. Where applicable, available information from recent studies in the vicinity of the study area will be compiled by checking New York City Department of Transportation’s (“NYCDOT”) Traffic Information Management System database. New traffic data collection is recommended; however, additional coordination with NYCDOT will likely be required to collect, validate, and adjust the traffic counts, related to the COVID-19 pandemic.

Time periods. Networks will be developed for weekday AM, midday, PM, and Saturday midday peak hours.

Study intersections. Eleven traffic study intersections identified for a detailed analysis are as follows and as illustrated on Figure 3, “Proposed Traffic Study Area”:

- Clarkson Avenue and New York Avenue
- Clarkson Avenue and Albany Avenue
- Clarkson Avenue and East 42nd Street
- Clarkson Avenue and East 43rd Street
- Clarkson Avenue and Utica Avenue
- Winthrop Street and Albany Avenue
- Winthrop Street and Troy Avenue
- Winthrop Street and Schenectady Avenue

- Winthrop Street and Utica Avenue
- Winthrop Street with the proposed development's two new private driveway access points



Source: Esri, HERE, Garmin, Intermap, increment P Corp., GEBCO, USGS, FAO, NPS, NRCAN, GeoBase, IGN, Kadaster NL, Ordnance Survey, Esri Japan, METI, Esri China (Hong Kong), (c) OpenStreetMap contributors, and the GIS User Community; STV Incorporated, 2022.

Figure 3

PROPOSED TRAFFIC STUDY AREA



KPC Mixed-Use Project



The analysis will continue with the following:

- Conduct travel speed-and-delay studies along principal corridors in the study area to provide supporting data for air quality and noise analyses. These speed-and-delay studies will be conducted along Clarkson Avenue, Winthrop Street, and Albany Avenue in conjunction with the traffic volume counts.
- Inventory physical and operational data as needed for capacity analysis purposes at each of the analyzed intersections. The data collected will be consistent with current *CEQR Technical Manual* guidelines and will include such information as street widths, number of traffic lanes and lane widths, pavement markings, turn prohibitions, parking regulations, and signal phasing and timing data. Official signal timings will be obtained from NYCDOT.
- Using *2000 Highway Capacity Manual* methodologies, determine existing traffic conditions at each analyzed intersection including capacities, volume-to-capacity (“v/c”) ratios, average control delays per vehicle and levels of service (“LOS”) for each lane group and intersection approach, and for the intersection overall.
- **No Action conditions.** Planned projects that will be developed in the area in the future without the Proposed Project (the No Action conditions) will be identified, and the associated future No Action travel demand generated by these projects will be determined. The future traffic volumes from No Action projects will be estimated using published environmental assessments or forecasted based on current *CEQR Technical Manual* guidelines, U.S. Census data, and/or data from other secondary sources. An annual growth rate will be applied to existing traffic volumes to account for general background growth, per *CEQR Technical Manual* guidelines. Mitigation measures planned for No Action projects will also be reflected in the future No Action traffic network as will any relevant initiatives planned by NYCDOT and other agencies. No Action traffic volumes will be determined, v/c ratios and levels of service will be calculated, and congested intersections will be identified.
- **With Action conditions.** The following steps will be taken for analyses of the Proposed Project:
 - Based on available sources, U.S. Census data, standard references, and other City-approved EIS documents, forecast the travel demand generated by the Proposed Project’s land uses and the modes of transportation expected to be used for these trips.
 - Determine the volume of vehicle traffic expected to be generated by the Proposed Project, assign that volume of traffic in each analysis period to the approach and departure routes likely to be used, and prepare balanced traffic volume networks for the future condition with the Proposed Project (the With Action conditions) for each analysis period.

- Determination of potential traffic impacts will again follow a two-step process to determine the resulting v/c ratios, delays, and LOS for the future With Action conditions, and identify significant traffic impacts in accordance with current *CEQR Technical Manual* criteria.
- Identify and evaluate potential traffic mitigation measures, as appropriate, for all significantly impacted locations in the study area in consultation with ESD and NYCDOT. Potential traffic mitigation would likely include operational measures such as changes to intersection approach pavement markings, curbside parking regulations, and traffic signal timing/phasing.
- Where impacts cannot be mitigated, they will be described as unavoidable adverse impacts. As appropriate, recommendations for avoiding or reducing identified impacts to less-than-significant levels (with or without mitigation) would be provided in the EIS.

The With Action conditions will include the analysis of two newly created intersections on Winthrop Street as a result of introducing new private driveway access points to the Project Site. The determination of the lane configuration and traffic control of these intersections will be included in the analysis.

Bus Analysis

As the Proposed Project would potentially add 50 or more trips per direction through the peak load point on the B12 bus route, a bus analysis is warranted, as per the *CEQR Technical Manual*, and will be undertaken according to the following steps:

- **Existing conditions.** A detailed bus-line haul analysis will be performed for the weekday AM and PM peak hours for the B12. Existing peak hour bus service levels and maximum load-point ridership will be documented.
- **No Action and With Action conditions.** Future No Action and With Action conditions will be determined in a manner similar to that described above for existing conditions. The effects of new project-generated peak hour trips will be determined, and bus transit mitigation, if warranted, will be identified in consultation with ESD and MTA New York City Transit (“NYCT”).

Subway Analysis

As the Proposed Project would potentially add 200 or more passengers at the Winthrop Street Station (2/5 Subway Line), a detailed subway analysis is warranted, as per the *CEQR Technical Manual*, and will be undertaken according to the following steps:

- **Existing conditions.** A detailed subway line-haul analysis will be performed for the peak load during the weekday AM and PM peak hours for the 2/5 subway lines. Additionally, pedestrian LOS analyses will be performed for platform-to-street elements (i.e., stairs, turnstiles, fare gates) at the Winthrop Street Station.

- **No Action and With Action conditions.** Future No Action and With Action conditions will be determined on subway line haul and subway station elements in a manner similar to that described above for existing conditions. The effects of new project-generated peak hour trips will be determined and subway mitigation, if warranted, will be identified in consultation with ESD and NYCT.

Pedestrian Analysis

Detailed pedestrian analyses are generally warranted if a proposed action is projected to result in 200 or more new peak hour pedestrians at any sidewalk, corner reservoir area, or crosswalk, as per the *CEQR Technical Manual*. As the Proposed Project would add over 200 new peak hour pedestrian trips in the immediate vicinity of the Project Site, a pedestrian analysis is warranted and will be undertaken in accordance with the following steps:

- **Existing conditions.** A quantitative analysis of pedestrian conditions will be prepared for the weekday AM, midday, PM, and Saturday midday peak periods at selected crosswalk and sidewalk elements at:
 - Clarkson Avenue and Albany Avenue – north crosswalk
 - Clarkson Avenue between Albany Avenue and East 42nd Street – north sidewalk
 - Clarkson Avenue between East 42nd Street and East 43rd Street – north sidewalk
 - Albany Avenue between Clarkson Avenue and Winthrop Street – east sidewalk
- **No Action and With Action conditions.** The analysis will evaluate No Action and With Action conditions during the weekday AM, midday, PM and Saturday midday peak hours, and the potential for incremental demand from the Proposed Project to result in significant adverse impacts based on current *CEQR Technical Manual* criteria. Potential measures to mitigate any significant adverse pedestrian impacts will be identified and evaluated, as warranted, in consultation with ESD and NYCDOT.

Vehicular and Pedestrian Safety Evaluation

An examination of vehicular and pedestrian safety issues will be conducted. Crash data for study area intersections from the most recent three-year period will be obtained from NYCDOT. These data will be analyzed to determine if any of the studied locations may be classified (according to *CEQR Technical Manual* criteria) as “high-crash” locations and whether trips and changes resulting from the Proposed Project would adversely affect vehicular and pedestrian safety in the area. If any high-crash locations are identified, feasible improvement measures will be explored to alleviate potential safety issues. As appropriate, improvements expected to alleviate identified potential vehicular and pedestrian safety issues will be described in the Transportation chapter of the EIS.

Parking Analysis

Parking demand attributable to the Proposed Project will be analyzed. To begin, proposed on-site parking will be evaluated to determine whether project-generated demand will be accommodated. If not, a detailed parking assessment will be conducted. The detailed parking assessment will comport with guidance provided in the *CEQR Technical Manual* and will consist of the following steps:

- **Existing conditions.** Inventory existing public parking lots and garages (if available) and the on-street parking spaces within ¼-mile (which represents a typical “walkable” radius) of the Project Site, noting locations, capacities, and peak utilization levels. Given that the Proposed Project is primarily residential, the peak parking demand is anticipated to occur during the overnight/early morning hours. The Proposed Project will include commercial and community facility uses that will generate a daytime parking demand and are anticipated to use the proposed on-site parking supply and available off-site on-street parking. Therefore, the parking analysis will be performed for the early weekday morning period (i.e., before 7 AM) and evening PM period to capture the residential demand, and the weekday midday period for the commercial and community facility parking demand.
- **No Action conditions.** Future parking availability in the ¼-mile study area will be projected, based on anticipated background growth rates and forecasts of demand from new development. Any existing off-street parking facilities expected to be displaced or new facilities expected to be developed in the future will be reflected in this projection of No Action conditions.
- **With Action conditions.** The future conditions with the Proposed Project will be evaluated based on consideration of two factors: the proposed on-site parking supply attributable to the Proposed Project (i.e., new on-street parking supply), and the potential off-site capacity that would be expected to be available to accommodate any overflow parking demand from the Proposed Project, thus adding to the overall new on-street parking demand. Any potential parking shortfall within the study area will be identified.

TASK 12: AIR QUALITY

Air quality analyses will be carried out in accordance with the *CEQR Technical Manual*, as well as other relevant guidance and protocols provided by Department of Environmental Conservation (“DEC”), NYCDEP, and the U.S. Environmental Protection Agency (“USEPA”). The proposed air quality analyses will evaluate both stationary source impacts and mobile source impacts, to consider:

- The potential for traffic volumes and redistribution of traffic associated with the proposed development to result in significant mobile source air quality impacts; and

- The potential for emissions from existing off-site air toxics emission sources within 400 feet and/or major or large sources to significantly impact receptors at the proposed development buildings.

Given that the buildings would not operate with fossil fuels (electric only), there would be no potential for emissions from the HVAC systems of the proposed development buildings. As such, no analysis of potential impacts of stationary source pollutants from the proposed development buildings is warranted. Should exceedances of the National Ambient Air Quality Standards (“NAAQS”), Significant Threshold Values, or *de minimis* values be predicted, mitigation measures that could be undertaken to reduce these values would be identified.

Project-Induced Mobile Source Air Quality Impacts Assessment

Emissions from project-related traffic, and other traffic associated with existing uses, have the potential to increase mobile source emissions significantly at nearby sensitive land uses. Therefore, screening thresholds contained in the *CEQR Technical Manual* will be used to determine whether detailed mobile source analyses are required. If this screening of mobile sources identifies intersections requiring further analysis, the EIS would determine whether future traffic generated by the Proposed Project would cause or exacerbate a violation of the 1-hour and 8-hour ambient air quality standard for carbon monoxide (“CO”), or exceed the NYCDEP CO *de minimis* criteria and 24-hr and annual Significant Threshold Values for particulate matter with a diameter of 2.5 micrometers or less (“PM_{2.5}”) near any of these locations.

- **Screening.** A screening level analysis, based on guidelines provided in the *CEQR Technical Manual*, will be conducted to identify those air quality intersections that will be studied in detail for the With Action conditions. This screening analysis will be conducted for the 2031 analysis year for the weekday AM, midday, PM, and Saturday midday peak periods.

For the CO microscale analysis, a volume screening threshold of 170 vehicles, as defined by the *CEQR Technical Manual* screening guidelines for this area of Brooklyn, will be utilized. These sites will include locations of critical roadway links and heavily congested intersections, locations adjacent to sensitive land uses, and representative locations throughout the study area that may be affected by the traffic generated by the Proposed Project. It is anticipated that one CO microscale analysis site will be selected based on the results of this screening level analysis.

For PM_{2.5}, NYCDEP has developed an interim guidance policy that recommends a detailed quantitative analysis be conducted if the number of project-generated heavy duty diesel vehicles traveling through any given intersection exceeds the screening threshold defined in the *CEQR Technical Manual*. If the screening value is exceeded, a quantitative PM_{2.5} analysis will be conducted at one “worst-case” analysis site. It is anticipated that PM_{2.5} 24-hr and annual levels will be estimated at one analysis site for future 2031 With Action and No Action conditions.

- **Detailed Microscale Mobile Source Analysis (“Dispersion Modeling”).** If a screening threshold is exceeded, a detailed microscale mobile source analysis using *CEQR Technical Manual* procedures will be conducted to estimate potential impacts near congested locations. This analysis will employ the latest USEPA AERMOD dispersion model and the latest USEPA emission factor algorithm (currently MOVES3) for the CO and PM_{2.5} microscale analyses. Intersection geometries will be developed for each analysis site.

Modeling inputs appropriate for the study area, as well as background levels, will be obtained from the DEC and NYCDEP. For the CO and PM_{2.5} microscale analysis, the latest five years of meteorological data from John F. Kennedy International Airport will be used.

- **Parking.** The Proposed Project would not introduce a new off-street parking facility or lot. Therefore, an air quality analysis for a parking facility/lot is not warranted.

Stationary Source Air Quality Impacts Assessment

- **Project HVAC Emissions (Project on Existing and Project on Project Assessment).** An assessment of project-generated HVAC emissions on surrounding land uses will not be needed. Assessing the potential impact of project HVAC emissions is typically a function of fuel type, estimated stack heights, building size (gross floor area), and location of each emission source relative to a nearby sensitive receptor site. The Proposed Project would use electric power for HVAC and hot water needs and, with this commitment, the Proposed Project would not incur any local air quality impacts. The EIS will describe this commitment as part of the assessment.
- **Existing Large Emission Sources in Vicinity of Site.** An assessment of emissions onto the Project Site from surrounding land uses will be conducted for the Proposed Project in the full build-out condition. Existing large permitted emission sources within a 1,000-foot radius will be identified and air quality emission data will be obtained from NYCDEP and DEC. The available information sources, including the DEC permit database, will be used to identify “major” (with Title V permits) or “large” (with State Facility permits) sources within a 1,000-foot radius of the Project Site. If warranted, a stationary source analysis will be conducted using the AERMOD model together with the latest meteorological data predicting potential pollutant concentrations for NO₂, SO₂, PM_{2.5}, and PM₁₀ at receptors identified at the proposed development and comparing these values to the NAAQS and the NYCDEP *de minimis* criteria to determine significance.

Currently, there are two facilities with active air permits within 1,000 feet of the Project Site, one major source facility (Air Title V Permit Facility) and one large source facility (Air State Permit Facility). Specifically, the major source facility, the Kings County Hospital Center, is located approximately 950 feet to the west of the Project Site across Albany Avenue, and the large source facility, the KPC, is located on the eastern portion of the KPC Campus, approximately 500 feet east

of the Project Site; therefore, a detailed air quality analysis for criteria pollutants (SO₂, NO₂, PM₁₀, and PM_{2.5}) will be conducted.

- **Air Toxics Analysis.** This analysis will address the potential impacts that any off-site air toxics emission sources that are identified within 400 feet may have on the Proposed Project. The following procedures will be used to estimate the potential air quality impacts of these toxic emissions:
 - A survey of manufacturing and industrial uses within a 400-foot radius of each new residential area will be conducted using USEPA, DEC (Air Guide-1), and NYCDEP (Bureau of Air Resources) databases to identify facilities that have the potential to impact the proposed redevelopment area.
 - Air permits for these facilities will be acquired and reviewed (if available from NYCDEP). The analyses will then be conducted to determine the potential of the air toxics emissions released from the existing permitted emission sources to adversely affect the new development.
 - The DEC Air Guide-1 model, which uses very simple and conservative calculations, will be used to perform a screening-level analysis. If the screening indicates the need to perform a more detailed analysis, the AERMOD model will be used to perform a refined analysis to estimate impacts of carcinogenic and non-carcinogenic toxic air pollutants using unit risk factors and hazard indexes. Estimated pollutant concentrations will be compared to short-term or annual health guidelines values (i.e., short-term guideline concentrations or annual guideline concentrations) and findings reported.

TASK 13: GREENHOUSE GAS EMISSIONS & CLIMATE CHANGE

According to the *CEQR Technical Manual*, a greenhouse gas (“GHG”) emissions assessment is typically conducted for larger projects (350,000 sf or greater) subject to an EIS. Additionally, Local Law 97, passed in April 2019, sets emission caps for buildings larger than 25,000 sf beginning in 2024, and the Climate Leadership and Community Protection Act (“CLCPA”), passed in July 2019, requires New York to reduce economy-wide greenhouse gas emissions 40 percent by 2030 and no less than 85 percent by 2050 from 1990 levels. The Proposed Project will also be evaluated for consistency with New York City’s OneNYC plan, which states a goal of eliminating 100 percent of greenhouse gas emissions by 2050. A detailed analysis of greenhouse gas emissions from the Proposed Project would be conducted to confirm that the Proposed Project would be consistent with guidelines provided in the *CEQR Technical Manual*, Local Law 97, and the CLCPA. Findings will be summarized in the EIS.

TASK 14: NOISE AND VIBRATION

Both temporary and long-term increases in noise and vibration levels in the immediate vicinity of the Project Site could result from development, use, and occupancy, as well as construction period activities. The principal issues of concern with respect to the residential development proposed for the Project Site include:

- Mobile and stationary source noise from on-site operations; and
- Off-site noise that may affect the Proposed Project (i.e., traffic, ventilation equipment, etc.).

The noise and vibration assessments will be conducted according to the guidance contained in the *CEQR Technical Manual*. If available and relevant, environmental studies for other projects in close proximity to the study area will also be reviewed.

Existing Ambient Noise Conditions – Noise Monitoring

Sources of “ambient” noise may include manufacturing/industrial sources and noise from roadways interior and exterior to the Project Site. The following monitoring activities will be undertaken to determine ambient noise in the vicinity of the Project Site, which will serve as an analytical “baseline” for the noise analyses. All noise monitoring would include A-weighted sound levels, using the L₁₀ and L_{eq} noise descriptors.

- **Peak-hour traffic noise monitoring.** Peak-hour traffic noise monitoring will be conducted for up to eight locations to establish baseline noise conditions within and surrounding the Project Area. Where appropriate, simultaneous traffic counts will also be performed. Monitoring may be carried out for peak AM, midday, and PM weekday and midday weekend periods.
- **24-hour noise monitoring.** As the Proposed Project will include residential facilities, 24-hour noise monitoring will be conducted at up to three locations where ambient noise levels could affect the Proposed Project.

Noise Assessment

- **Screening.** A screening analysis will be conducted per the *CEQR Technical Manual*. Mobile source conditions will correspond to the traffic analyses. If traffic analyses identify locations that would receive a doubling of passenger car equivalents with the Proposed Project, then a detailed analysis for mobile source noise impacts from the Proposed Project will be performed.
- **Detailed mobile source analysis:** To determine potential impact, detailed noise analyses based on the logarithmic proportional modeling procedure provided by the *CEQR Technical Manual* will be conducted at the selected peak hour monitoring locations. The noise analysis will consider Existing, No Action, and With Action conditions. According to the *CEQR Technical Manual*,

permissible increases in noise would range from 3 to 5 A-weighted decibels (“dBA”), depending on the noise levels projected for the No Action conditions.

- **Noise abatement in project design.** Required attenuation for the Proposed Project will be predicted based on noise analysis results. Should the ambient noise conditions dictate a need for specific control measures to be considered in the design and construction of the residential and/or medical buildings on the Project Site as part of the Proposed Project, these measures would be identified and the effectiveness of these measures would be addressed in a qualitative manner, based on fundamental noise attenuation principles and assessment procedures referenced within the *CEQR Technical Manual*.

TASK 15: PUBLIC HEALTH

As described in the *CEQR Technical Manual*, a public health analysis is not necessary for most projects; it may be necessary for projects where a significant unmitigated adverse impact is found in other CEQR analysis areas, such as air quality, water quality, hazardous materials, or noise. It is likely that any such impacts that may be determined with the Proposed Project would be avoided, minimized, or mitigated and, thus, it is not expected that there will be a need for further consideration in a Public Health effects assessment. However, a detailed Public Health analysis would be included if potential significant unmitigated adverse impacts associated with air quality, water quality, hazardous materials, or noise are identified in other sections of the EIS.

TASK 16: NEIGHBORHOOD CHARACTER

The character of a neighborhood is established by numerous factors, including land use patterns, the scale of its development, the design of its buildings, the presence of notable landmarks, and a variety of other features. A preliminary assessment of neighborhood character will be provided in the EIS to determine whether changes expected in other technical analysis areas — land use, zoning, and public policy; socioeconomic conditions; community facilities; open space; historic and cultural resources; urban design and visual resources; shadows; transportation; and noise — may affect a defining feature of neighborhood character. It is not anticipated that potential effects of the Proposed Project would affect defining features of the surrounding neighborhood, which is characterized by a large concentration of healthcare infrastructure, as well as urban residential neighborhoods to the north and south of the Project Site. The preliminary assessment will be summarized in the EIS, as appropriate, and, if required, a more detailed analysis of neighborhood character with regard to impacts determined in other technical areas will be provided, per the guidance of the *CEQR Technical Manual*.

TASK 17: CONSTRUCTION IMPACTS

The *CEQR Technical Manual* provides guidance on when it is appropriate to include a detailed assessment of construction impacts. According to the *CEQR Technical Manual*, construction duration is often broken down into short-term (less than two years) and long-term (two or more years). The EIS will include a review of potential construction period effects attributable to project construction. In particular, the Construction Impacts chapter of the EIS will assess potential construction-related impacts to transportation, air quality, and noise and vibration. This chapter will also provide the singular description of construction activities such as phasing, staging plans, equipment that would be utilized, and schedule, based on information provided by the Developer.

Transportation

As described previously in the project understanding, a construction-phase traffic analysis will be performed to assess the potential impact of construction worker and truck trips on the study area roadway network. The number of estimated workers and truck trips will be determined and assigned to the roadway network to determine the study intersections that would require a detailed analysis during the peak quarter of construction in accordance with the *CEQR Technical Manual* guidelines. It is anticipated that up to five intersections will require examination for the construction-phase analysis for the weekday AM and PM periods. Trip generation and assignments will be performed for major developments on adjacent properties (currently under construction) to estimate the background operational trips during the No Action conditions for the construction phase analysis year. A construction-phase parking analysis will also be performed to assess the potential impact of construction worker parking on the study area.

Air Quality

A quantitative assessment of air quality-related construction phase impacts will be undertaken. Below is a description of the quantitative assessment:

The assessment of construction period air quality impacts is concerned with pollutants introduced on-site and off-site by project construction activities. This task will be undertaken for the worst-case study year, which would be anticipated to represent the most construction-related activities associated with the Proposed Project. To determine the worst-case construction year for evaluation, estimated annual emissions of PM_{2.5} will be calculated for critical years of construction identified for assessment. The detailed assessment will determine whether the projected construction operations would cause or exacerbate violations of applicable NAAQS and/or cause impacts greater than significance threshold values established by DEC and NYCDEP for 8-hour CO, 24-hour and annual PM_{2.5}, 24-hour PM₁₀, and annual NO₂. Given that Ultra-Low Sulfur Diesel with 15 ppm sulfur content is required in New York, SO₂ from

diesel engines would be negligible. Therefore, a SO₂ analysis is not warranted for the construction phase analysis. The following data elements will be utilized in the analysis:

- Types of equipment, fuel used, and operations anticipated at the construction site, and duration and phasing of construction activities;
- Numbers of vehicles (trucks and automobiles) entering and leaving the construction site daily and during peak periods, and the effects of these vehicles on the traffic conditions of heavily traveled roadways and congested intersections; and
- Locations of nearby sensitive existing and future land uses.

On-Site Construction Activity Impacts

The analysis of the potential impacts from on-site activities at the construction site will include estimation of emissions generated by construction equipment and dust-generating activities. Quantification of construction-related impacts will be based on the year of analysis identified above, utilizing: peak month, peak 24 hours, and peak hour of construction activity for the Proposed Project. The analysis will follow the steps below:

- Evaluation of construction areas and nearby sensitive land uses, construction schedules, levels and duration of construction activities, and a determination of the areas with the greatest potential for construction-phase air quality impacts;
- Estimation of emissions generated by construction activities (demolition, excavation, construction) at the construction site during the years of peak construction activity, including emissions from fugitive dust and exhaust from diesel-powered equipment and trucks, as well as emissions from temporary boilers operating during the construction phase;
- Estimation of hourly, daily, monthly, and annual emissions for CO, NO₂, PM₁₀, and PM_{2.5} for the various stages and types of construction activities associated with the Proposed Project; and
- Dispersion modeling, using USEPA's AERMOD dispersion model, of construction-phase emissions of each construction area for the highest period for each pollutant.

Off-Site (Mobile Source) Construction Activity Impacts

The additional truck and automobile (worker) trips generated by the construction activities could affect traffic conditions along heavily traveled roadways and congested intersections. The potential air quality impacts of these trips will be estimated as follows:

- Guidelines developed in the *CEQR Technical Manual* will be utilized to select intersection locations subject to a preliminary screening-level analysis. This analysis will estimate the potential to

significantly impact PM_{2.5} levels near these sites. Screening will be conducted per the mobile source procedures outlined in the operational analysis.

- Pollutant concentrations will be screened at each analysis site, if any are identified, for future No Action and With Action (construction) conditions for one future-year analysis and peak time period of most intense construction activity.

Cumulative On-Site Plus Off-Site Impacts

The cumulative (on-site and off-site) modeling results of the Proposed Project construction impacts will be compared to the NAAQS for each applicable pollutant. In addition, the estimated impacts of the construction activities will be compared with applicable significance threshold levels. Additionally, a “project-on-project” analysis of stationary source emissions will be required within the Project Site because the Proposed Project will comprise multiple buildings, with some being built and occupied before others.

Noise and Vibration

Based on the year and time period of most intense construction activity, the analyses will be undertaken as follows:

Mobile Noise Sources

Potential off-site construction-related traffic activity on roads exterior to the Project Site (in particular, the movement of trucks to and from the site), could result in a temporary increase in noise and vibration levels at sensitive locations on- and off-site that currently experience lower peak-hour traffic volumes. As a result, a traffic noise screening (per *CEQR Technical Manual* guidelines) will be conducted to determine if any locations would be affected by construction related traffic. If the screening indicates a need for a detailed traffic noise assessment, the EIS will include a detailed traffic noise assessment to evaluate potential construction period impacts for the study year analyzed.

Construction-Site Noise Assessment

Noise from the construction site would result from machinery, equipment vehicles, and associated activities. This noise could affect existing sensitive receptor locations near the Project Site as well as spaces that may be occupied on the Project Site during project construction. The Federal Highway Administration’s (“FHWA”) Roadway Construction Noise Model (“RCNM”), or an appropriately developed noise spreadsheet model, will be utilized to determine noise equipment source levels and to assess the potential for noise impacts at sensitive receptors nearby. Modeled results will be compared to existing noise levels and the relevant construction noise criteria based on the *CEQR Technical Manual* guidance. The extent and duration of potential noise impacts at each potentially affected noise receptor location during the phase of construction with the highest intensity of construction activities will be considered.

Construction-Site Vibration Assessment

Potential impacts from construction-related vibration will be assessed with respect to both human annoyance and building damage. To determine impact, the Federal Transit Administration (“FTA”) construction criteria will be used, as appropriate, for the analyses. Construction schedule, phasing, activity, and equipment data will be developed for the noise and vibration assessments, including particular activities such as impact pile driving and blasting, which represent the two worst vibration-causing activities.

TASK 18: MITIGATION

If significant project impacts are identified in the analyses discussed above, practicable measures will be identified and assessed to mitigate those impacts. This chapter will summarize those findings. Where impacts cannot be practicably mitigated, they will be identified in the EIS as unavoidable adverse impacts.

TASK 19: ALTERNATIVES

The purpose of an alternatives analysis is to examine reasonable and practicable options that avoid or reduce project-related significant adverse impacts while achieving the goals and objectives of the Proposed Project. As stated in the *CEQR Technical Manual*, “CEQR requires that alternatives to the Proposed Project be identified and evaluated in an EIS so that the decision-maker may consider whether alternatives exist that would minimize or avoid adverse environmental effects.”

As there are no alternative sites for the Proposed Actions (the acquisition and sale of this specific site and its subsequent development), a No Action Alternative will be analyzed. The No Action Alternative would largely resemble existing conditions, with continued operation of the two existing single-adult men’s shelters, and no new development on the Project Site. If significant adverse impacts are identified that could not be mitigated, the EIS may evaluate an additional alternative project design and/or program that would be expected to avoid unmitigated impacts.

TASK 20: SUMMARY CHAPTERS

The EIS will include the following summary chapters:

Executive Summary

This chapter will include the key information that has been ascertained through this SEQRA environmental review process and that is disclosed within the body of this EIS and its accompanying appendices. The information comprising the executive summary will include findings of analyses, identification of impacts, and proposed mitigation measures.

Cumulative Effects

As noted in the task descriptions provided in this scope of work for other topical areas, such as open space, community facilities, transportation, air quality, noise, and construction impacts, analyses will be considered in combination to represent the entirety of the Proposed Actions. In particular, the relationship of the Proposed Actions, which includes the ESD approval of the GPP, will be assessed as a matter of land use, zoning, and public policy, for determination of potential cumulative effects related to any other recent or proposed development anticipated in the No Action condition in the surrounding neighborhood. The potential for combined effects associated with the Proposed Actions and any past, present, and reasonably foreseeable future actions that may affect the same environs as the Proposed Project will be considered for those technical areas wherein potential effects are expected with the Proposed Actions, specifically including: transportation, air quality, noise, and community facilities (early childhood programs and public libraries). In addition, potential construction-period effects expected with the Proposed Actions are also considered in the context of construction associated with other actions in the vicinity. This information will be summarized in the Cumulative Effects chapter.

Unavoidable Significant Adverse Impacts

This chapter will identify significant adverse impacts for which no practicable mitigation has been identified, or the mitigation of which requires actions of other agencies that cannot be guaranteed.

Growth-Inducing Aspects of the Proposed Project

This chapter will assess the Proposed Project's potential to induce new development within the surrounding area.

Irreversible and Irretrievable Commitments of Resources

This chapter will summarize the development associated with the Proposed Project and resources such as construction materials and energy that would be irretrievably committed should the Proposed Project be built.